

See [Figure 3-2](#) and [Figure 3-3](#) for the locations of the above-referenced short line railroads.

### **Condition Assessment Qualifiers**

Factors other than providing transportation and economic benefits to a community may affect a railroad's financial condition. An example is revenue from the storage of surplus rail cars, excursion train revenue, or leases of excess property. As these other sources of revenue are not generally reported by short lines, they have not been included in the above analysis. Depending on the level of such revenue, the ability of a short line to meet its long-range capital and maintenance needs without public assistance may vary.

The above stratification and evaluation is based on very general information and is intended to serve only as an indicator of potential conditions and as a guide for INDOT to anticipate future funding needs. **No representation as to the actual viability of the individual railroads mentioned above is intended or implied herein.**

## **4.0 RAIL INTERMODAL FACILITIES**

Rail intermodal facilities can be classified into two major categories: containerized and break bulk. Containerized facilities in Indiana are located on CSXT at Indianapolis and Evansville; on Norfolk Southern at Fort Wayne; and on the Toledo, Peoria & Western at Remington. Intermodal service is also available to Indiana shippers who can be efficiently served from rail intermodal terminals located in adjacent states, such as terminals at Chicago, Cincinnati, and Louisville.

To a large extent, the marketing of containerized—TOFC/COFC—rail intermodal freight service has been performed by third-party logistics entities, such as the Hub Group, Inc. These firms perform the direct retail marketing with a large percentage of intermodal customers. These third-party enterprises contract with the rail line-haul carrier for specified levels of annual volume commitments. Thus, a shipper receives a single freight bill from the third-party enterprise for the bundled service of local drayage and line-haul rail. Rail carriers do, however, market directly to certain segments of their intermodal business such as United Parcel Service, motor common carriers such as J.B. Hunt and Schneider National, and steamship lines.

### **4.1 Indiana Intermodal Development**

The potential expansion of containerized—TOFC/COFC—rail intermodal freight service in Indiana can take several generalized forms. One is additional service in existing lanes, which would provide an increase in service and possibly be more truck competitive. A second form of expansion is new service between markets not currently served. A third form is the introduction of emerging intermodal technology in short haul markets.

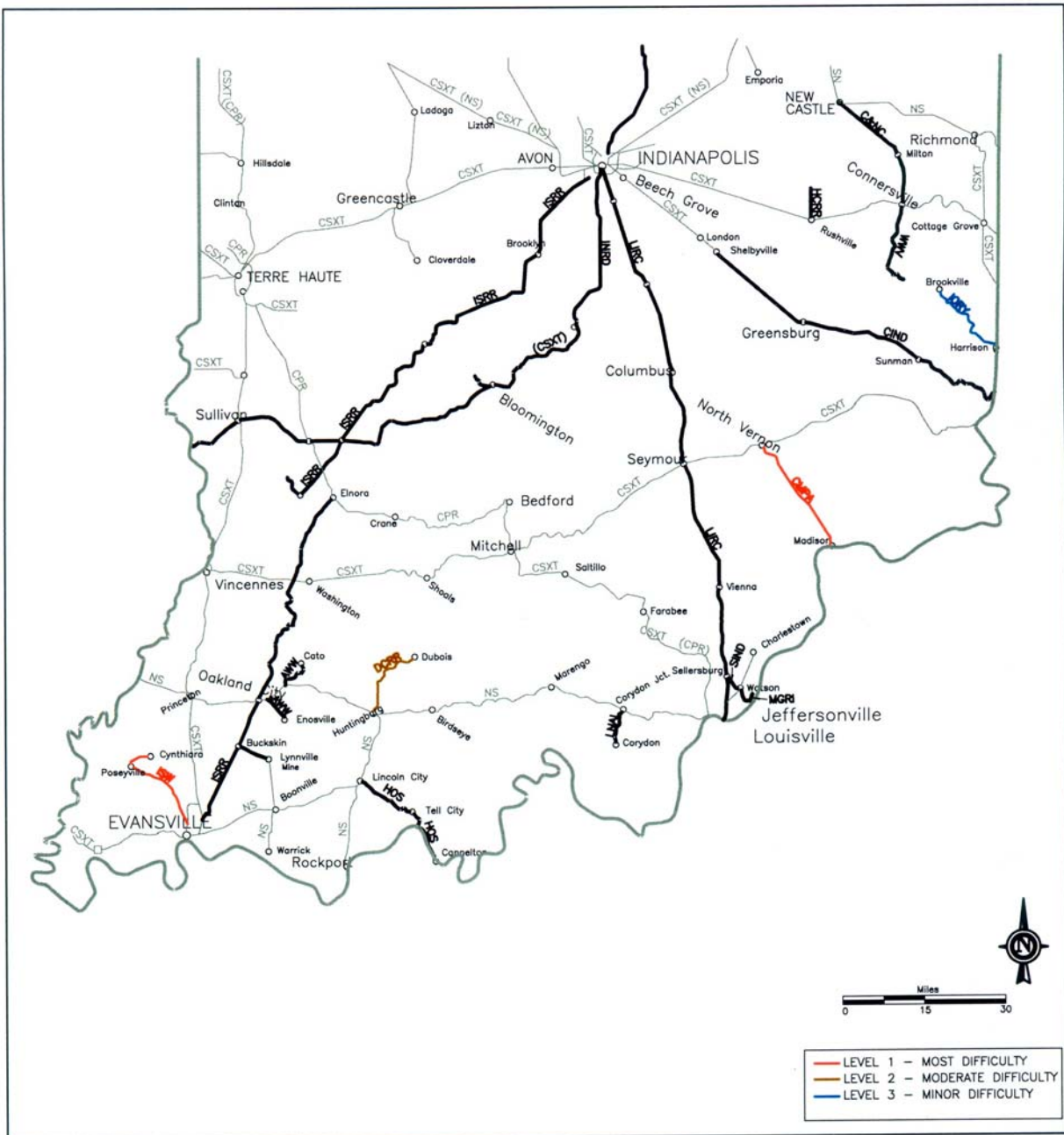
Since approximately three-quarters of Indiana interstate freight tonnage is truck traffic, the market is large. However, the majority of Indiana interstate truck tonnage originates or terminates in the adjacent states of Illinois, Ohio, Kentucky, and Michigan. Thus, rail intermodal service is at both a service and cost disadvantage, attributable to the relatively short hauls to/from adjacent states. Rail intermodal service generally requires a line-haul of 500 to 600 miles in order to generate sufficient revenue to cover the terminal expenses and take advantage of rail line-haul efficiencies.

The first form of expansion, the expansion of service in existing corridors, occurs when one or more trains is added to a rail market that currently exists. The particular challenge is to gather enough additional traffic to justify the additional expense. More frequent service can be expected to improve the reliability of service, but cannot be sustained in the long-term without a corresponding increase in volume.

## INDIANA RAIL PLAN



Figure 3-3 Short Lines That May Require Investment – SOUTH



The second form of intermodal expansion, new service between new markets not currently served, is much more challenging. This is compounded by the possible need to construct new intermodal terminals with significant capital investment. The fact that the rail carrier is currently not in either market may indicate a perceived lack of prospects for garnering sufficient traffic to cover costs in the near term.

For the most part, rail intermodal service, particularly in non-doublestack markets, has not achieved satisfactory revenue to variable cost (R/V/C) ratios. The low R/V/C ratios for some intermodal traffic, particularly TOFC, have prompted rail carriers either to close certain low-volume terminals or to withdraw TOFC from certain origin-destination (O-D) pairs. A R/V/C ratio less than 110 percent cannot be justified unless the prospects for improved revenues, lower costs, or both, can realistically be achieved in the near term.

The third form of intermodal expansion addresses the largest truck market segment, short hauls of less than 500 to 600 miles. This market has historically not justified entry by rail carriers because of substantial service and revenue inadequacies associated with conventional intermodal operations. Two unconventional intermodal technologies currently in service are RoadRailer<sup>®</sup> and *Expressway*. Norfolk Southern's Triple Crown Services, Inc., utilizes RoadRailer<sup>®</sup> equipment, as does Burlington Northern and Santa Fe Railway, Canadian National Railway, and Amtrak. As a specialized service directly marketed by Triple Crown Services (TCS), the combination of low capital investment in both terminals and locomotive horsepower per TCS train (as a result of bi-modal technology) produces a low cost structure. Low cost combined with above-average unit revenue for a highly tailored, motor carrier quality service (e.g., Just-In-Time), permits entry into markets in which both rail boxcars and conventional intermodal are not attractive to either the carrier or the shipper.

The other technology is the articulated platform that Canadian Pacific Railway operates with the brand name *Expressway*. In its Montreal–Toronto–Detroit corridor, CP utilizes 10 five-platform articulated cars. Each platform can accommodate a 28-to-57-foot trailer. The bridge plate between platforms remains in place during train movement. The terminal does not require trailer lifting equipment or reinforced trailers. *Expressway* service is offered in partnership with trucking companies, and this frequent, reserved-space service has been experiencing considerable growth. Trucking companies continue to perform the pick-up and delivery function, and thereby retain commercial control of the transaction with the shipper. With *Expressway's* ability to provide a reliable, efficient line haul function combined with low cost terminal facilities, motor carriers can substitute attractive rail line haul costs for their own line haul. At present, CP is the only operator of this equipment.

## **4.2 CSX Intermodal, Inc. (CSXI) and CSXT in Indiana**

CSXI is a subsidiary of CSX Corporation and markets containerized (trailers and containers) intermodal service, both domestic and international. Because it is a unit of CSX Corporation, the major portion of CSXI's nationwide network utilizes the CSXT rail system for line haul movements.

The CSXI nationwide network consists of 48 terminals, including two in Indiana: Indianapolis (Avon) and Evansville. The Indianapolis terminal is operated under a turnkey contract for CSXI. The Evansville terminal is directly operated by CSXI. No intermodal service is operated between the two terminals.

At both Indianapolis and Evansville, peak volume days are Thursday and Friday, and at the end of the month and quarter. Both terminals have two side-loaders and two in/out lanes. Steamship and parcel traffic primarily moves under transportation contracts, while intermodal marketing companies' (IMC) traffic moves under tariffs that may or may not change frequently, based on market opportunities.

Each terminal has 7 personnel plus an additional 5 people performing maintenance functions, for a total of 12. In addition to the 12 individuals at each terminal, there are drayage personnel and other

overhead-related staff for an estimated grand total of about 100 individuals attributable to CSXI operations in Indiana.

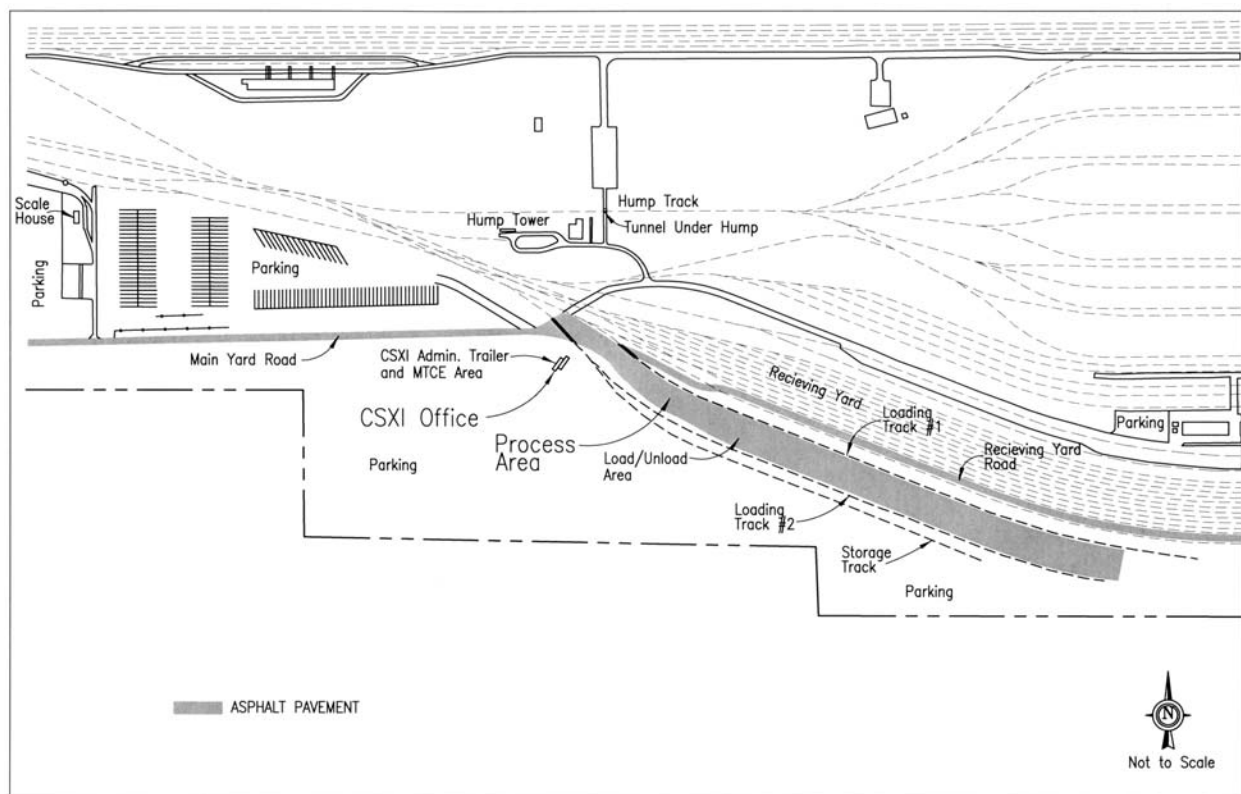
Determining what drayage distance is economically viable on a trailer/container load involves several factors, including whether there is a lengthy drayage at just one or both ends, commodity and unit revenue, and whether there is a backhaul available. In some instances a dray of 100 to 125 miles at one end may be economically justifiable if the above factors are favorable.

#### 4.2.1 Indianapolis

This intermodal terminal occupies 25 acres at Avon Yard, with room for future expansion of the facility. Refer to Figure 4-1 for the layout. Indianapolis is served by two eastbound and two westbound intermodal trains. Westbound traffic to East St. Louis, including interchange traffic, is minimal at Avon.

The volume in the year 2001 was 24,000 lifts; in the year 2000 the volume was 23,000. A major customer is United Parcel Service with significant volumes to the Worcester, MA sort center and Little Ferry, NJ, near the UPS sort center at the Meadowlands. The Indianapolis traffic is primarily outbound (eastbound) with a split of about 50 percent containers and 50 percent trailers.

**Figure 4-1 CSX Intermodal Facility, Avon (Indianapolis)**



CSXI's service design plan at Indianapolis consists of 10 O-D pairs, four of which are Canadian points. The U.S. markets, in addition to Little Ferry, NJ, and Worcester, MA, are Boston, MA; Springfield, MA; Philadelphia, PA; and Syracuse, NY. CSXI selects specific markets for which it will ordinarily build a "block" of rail cars at Indianapolis. Across its intermodal network, CSXI will assess shippers a \$2,000 surcharge for each move made where the O-D lane is not specifically offered and CSXI agrees to provide customized service. Baltimore–Indianapolis, for example, is not an O-D pair offered by CSXI.

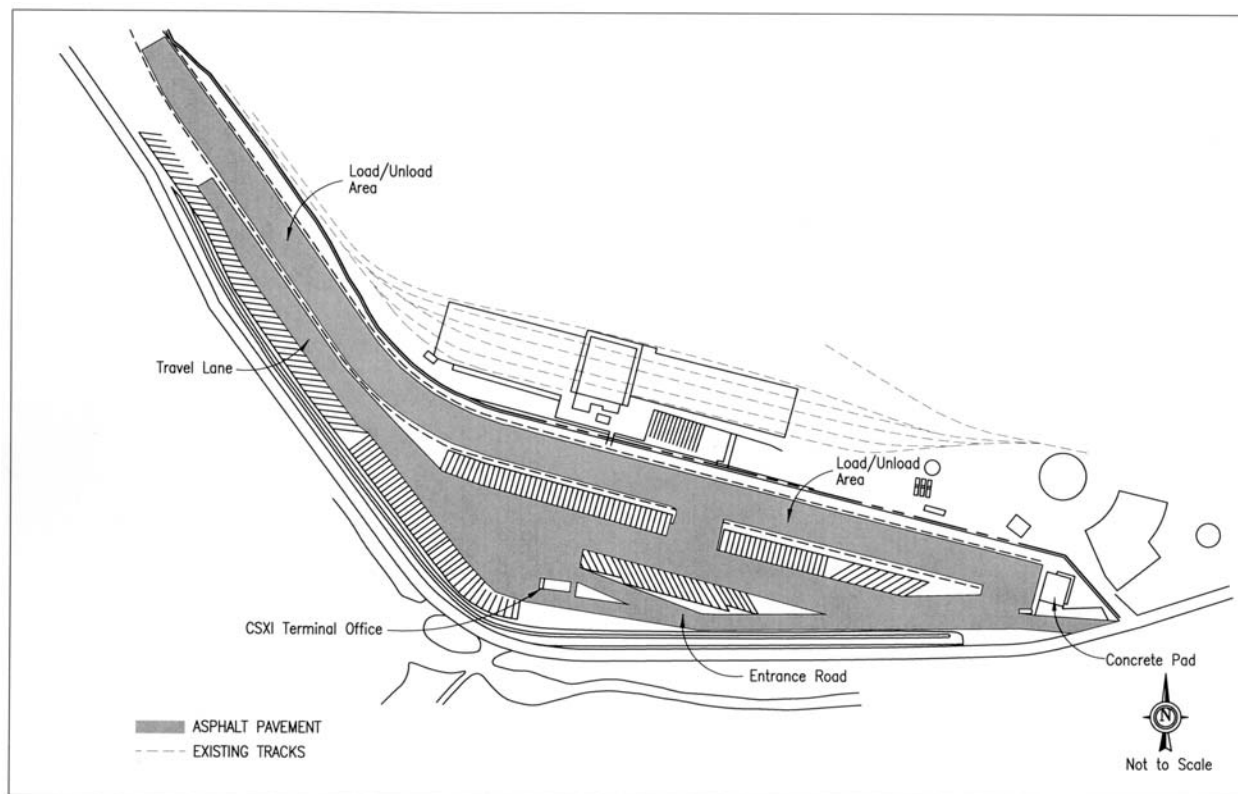
### 4.2.2 Evansville

The intermodal terminal (Figure 4-2) occupies 17 acres at Howell Yard in Evansville, with little or no room currently available for facility expansion.

Evansville is served by one northbound and one southbound train operating in the corridor between Chicago, Nashville, Atlanta, and Jacksonville. The volume in the year 2001 was 23,000 lifts. In the year 2000, the volume was 24,000. The terminal is currently operating at about 75 percent capacity. The equipment split is about 65 percent containers and 35 percent trailers. A major inbound customer is land-bridge (water/rail) container traffic to Toyota, Inc. A major outbound customer is Whirlpool, Inc. to the southeast, including Atlanta and Florida, as well as containers to the west coast.

Significant demand for eastbound service from Evansville has not materialized. Such service would have to operate via Chicago, in the absence of a through train. CSXI's service design plan at Evansville has substantially more O-D pairs than its terminal at Indianapolis, including 39 points that are off-line to CSXT, including Canada and Mexico. CSXI also offers service between Evansville and the CSXI terminal at Bedford Park in Chicago, IL, a line haul of less than 300 miles, with a second morning delivery, and for which no direct Interstate Highway alternative exists.

**Figure 4-2 CSX Intermodal Facility, Evansville**



### 4.3 Norfolk Southern Railway / Triple Crown Services, Inc.

Triple Crown Services, Inc. (TCS) is a wholly-owned subsidiary of Norfolk Southern Corporation. TCS is a truckload transportation company utilizing carless, bimodal RoadRailer® trailer technology to combine both over-the-road and rail line haul movement. The TCS fleet consists of 5,500 trailers that are 53 feet long and 102 inches wide, with slack-free coupling for movement in dedicated TCS trains. The headquarters and principal hub of TCS operations is Fort Wayne, IN. There are 11

other TCS terminals, including Toronto, Dallas, and Mexico City, which are off-line points to NS. TCS is currently authorized by the Federal Railroad Administration to operate trains up to 125 RoadRailer® trailers long.

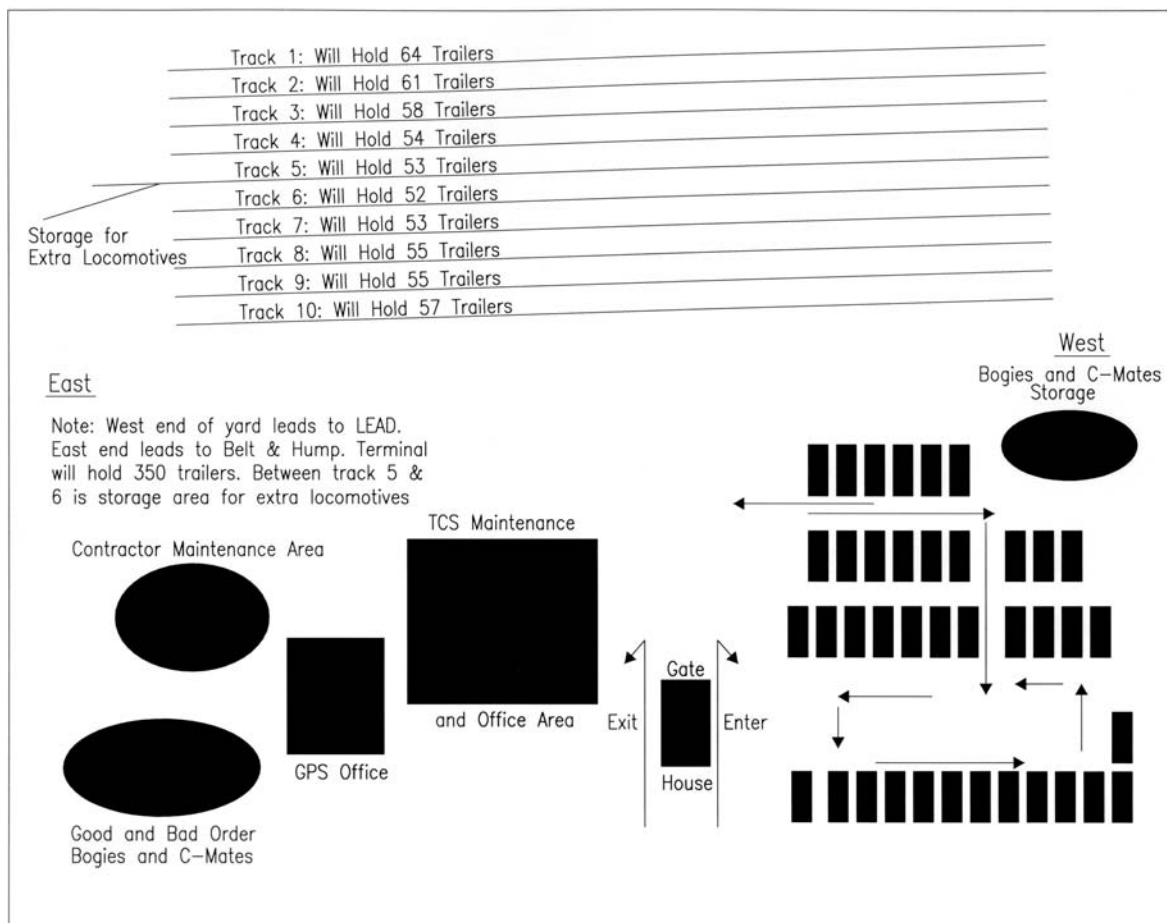
Service lanes available at Fort Wayne are St. Louis, MO; Kansas City, MO; Dallas, TX; Atlanta, GA; Jacksonville, FL; Harrisburg, PA, and northern New Jersey. The primary traffic lanes at Fort Wayne are Atlanta, Kansas City, and Harrisburg. TCS principal commodity market is automotive parts in those markets where rail boxcar service is not competitive. Other principal TCS commodities include appliances, paper, printed materials, and food.

In the year 2001, TCS at Fort Wayne handled 46,000 loads, approximately 60 percent of which was originating traffic. In the year 2000, TCS at Fort Wayne handled 42,000 loads. In 1995, the volume was 29,000. TCS estimates that all its traffic would otherwise move in line haul by truckload motor carriers.

The TCS terminal at Fort Wayne consists of 10 tracks, each about 2,900 feet in length. Parking capacity is about 200 trailers. Figure 4-3 shows a functional configuration of the Fort Wayne TCS Yard. There is a need for terminal expansion, but the facility is essentially land-locked. One alternative to create capacity is a network blocking strategy that would permit certain TCS trains to bypass the Fort Wayne hub. The average drayage distance is 75 to 80 miles. On average, 20 closely coordinated TCS trains utilize the TCS hub at Fort Wayne per weekday, with the typical train size being 73 units, powered normally by a single, high-horsepower locomotive.

There are approximately 45 TCS employees and 35 contractor employees at Fort Wayne.

**Figure 4-3 Norfolk Southern Triple Crown Services Terminal, Fort Wayne**





## 4.4 Toledo, Peoria & Western Railway

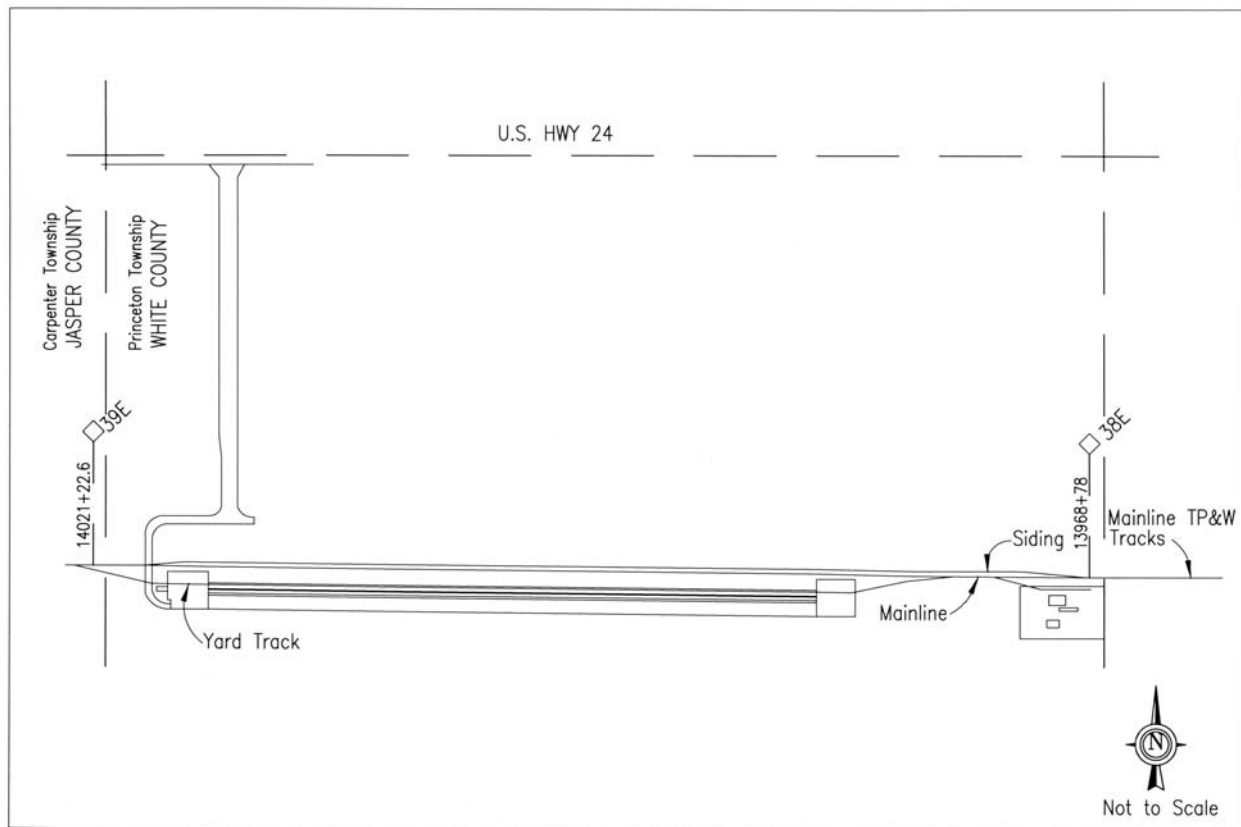
The Toledo, Peoria & Western Railway (TPW), a unit of RailAmerica, Inc., operates an intermodal terminal at Remington, adjacent to I-65 in Jasper County. This terminal (Hoosier Lift) was established by the Santa Fe Railway during the period it controlled the TPW. The terminal has an annual capacity of about 35,000 lifts. See Figure 4-4.

In the year 2001, the Remington terminal handled 5,000 lifts. The volume varies annually by plus/minus 1,000 lifts. The traffic is predominantly inbound.

The BNSF at Galesburg, IL, and CN-IC at Gilman, IL, are the intermodal interchange partners. Transit time to the west coast is 5 days. Train service is once per day, overnight to/from the interchanges, but longer than via Chicago area terminals, such as Willow Springs (BNSF), Corwith (BNSF), and Harvey (CN-IC).

Much of Remington terminal's traffic competes with the Chicago area intermodal terminals, which offers more opportunities for back haul and access to a chassis pool.

**Figure 4-4 TPW Intermodal Facility, Remington**



Some traffic at Remington utilizes I-65 for long drays, including to/from Louisville, nearly 200 miles.

TPW regularly examines short haul intermodal possibilities but has not yet found the right market and economics to offer the service. TPW route remains a future possibility for by-passing the Chicago terminal area. Estimates of the increase in annual intermodal lifts at the 26 Chicago area intermodal terminals over the next 20 years are expected to increase from the present 4.6 million to 11 million. Freight train movements are also expected to increase, by about 80 percent to nearly 2,400 per day. The TPW has the potential to become a through route from the BNSF at Galesburg to the NS at Logansport and CSXT at Watseka, IL, and Reynolds, IN.



## 4.5 Market Potential

There are a limited number of O-D pairs offered by CSXI at Indianapolis. O-D pairs have not been expanded to CSXI terminals that existed prior to the Conrail acquisition. With the recent expansion of terminal capacity at Atlanta, GA (Fairburn), the addition of an Atlanta/Indianapolis lane may be feasible if line congestion and capacity issues would not impede a reliable, quality service. CSXT has not previously operated intermodal service on the Indianapolis Subdivision between Cincinnati and Indianapolis. Similarly, CSXI currently does not offer a lane between Evansville and Atlanta.

### 4.5.1 Articulated Intermodal Technology

As noted elsewhere in this Rail Plan Update, the largest potential market for rail intermodal service is the short haul market segment. This is also the market in which it is most difficult for rail to compete profitably. Nevertheless, since 1996 the Canadian Pacific Railway (CP) has provided a short haul intermodal service in the Montreal–Toronto–Windsor–Detroit corridor. CP utilizes 10 five-platform, slack-free articulated cars. Each platform can accommodate a 28-to-57-foot trailer. The bridge plate between platforms remains in place during train movement. The CP terminal operation does not require trailer lifting equipment, reinforced trailers, or other than very basic facilities to perform its function. Approximately 40 trailers can be loaded or unloaded in about 45 minutes. This service, branded *Expressway* by CP, is offered in partnership with trucking companies and has been experiencing considerable growth for this frequent, reserved space, two-trains-per-day service. CP anticipates handling 100,000 trailers in 2002, compared with 60,000 in 2001. Trucking companies continue to perform the pick-up and delivery function, and thereby retain commercial control of the transaction with the shipper. CP currently is the only operator of this equipment.

Truck traffic moving on the I-65 corridor through Indiana between Louisville, KY, and Chicago, IL, could be a target for diversion to rail intermodal such as *Expressway*. The rail distance between Louisville and Chicago is approximately the same as between Montreal and Toronto, between which CP operates its *Expressway* service. Norfolk Southern does provide a non-time-sensitive service between Louisville and Chicago, requiring 50 hours between cut-off time at Louisville and availability at Chicago (Landers). CSXI does not operate a terminal in the Louisville area. Since there are several possible rail routes between Louisville and Chicago, each would have its unique capital program needs, including any necessary vertical clearance improvements, in order to make the route a reasonably efficient one for intermodal service. CP has a combination of ownership and trackage rights on CSXT on one of the routes between Louisville and Chicago.

An indication of the potential I-65 market lane is that the Louisville region is served by 92 motor carriers, including most major trucking companies. In addition, Louisville is the international air freight hub for United Parcel Service, and handles the 12th largest amount of air cargo tonnage in the world.

Application of the *Expressway* technology to a Louisville–Chicago route also creates the possibility of utilizing RailAmerica's TPW line to reach western markets. This possibility retains the niche market feature of *Expressway* technology while utilizing a Chicago bypass route. Since this service concept requires substantial utilization of trackage rights, INDOT, as a method of encouraging the service and improving the economics of the service, might consider either subsidizing the trackage rights fees which would be volume-related and thus reflect traffic diversions of traffic from the Indiana highway network to rail, or subsidizing the capital improvements necessary to make the service time-competitive. By example, the Virginia Department of Transportation is considering more lanes of highway on the 325-mile Interstate 81 in the Shenandoah Valley, one of the busiest routes in the country, with 4.5 million large trucks per year on certain segments. Norfolk Southern is working with VDOT on studies of major improvements to its parallel rail line that could divert about 1,000 heavy trucks per day from I-81 at a comparatively modest cost compared to the \$2 billion program cost of widening I-81. Other environmental benefits would also accrue as a result of a diversion of trucks to rail.

## **4.5.2 Bulk Intermodal**

Rail/highway bulk intermodal is a term used to describe the movement of dry or liquid commodities by a combination of rail cars and highway trailer. A substantial portion of the rail traffic base in Indiana consists of rail/highway bulk intermodal, with rail for the line haul and highway at either one or both ends of the commodity flow.

Various other services may be offered in conjunction with the above, such as inventory status and reporting through real time database access.

### **4.5.2.1 CSX Transportation**

CSXT offers a complete logistics service to Indiana rail shippers and receivers. This product is branded Transflo Logistics Services, a subsidiary of CSX Corporation, and is marketed to shippers of plastics, food-grade products, chemicals, waste products (such as municipal solid waste), minerals, construction materials, and commodities in import/export trade. The services include product transfer, on-site management, facilities management, inventory management, and quality control. These facilities are located in Indiana at East Chicago, Evansville, Indianapolis, Jeffersonville, and Lafayette.

In addition, CSXT offers transloading service for certain commodities through public distribution centers in Evansville, Fort Wayne, Indianapolis, New Albany, and Mount Vernon at the Southwind Maritime Centre. Grain has a unique transloading and value-added network. CSXT serves 75 grain elevators and 14 feed mills in Indiana.

### **4.5.2.2 Norfolk Southern Railway**

NS offers shippers a logistics management system comparable to CSX's, known as Modalgistics. NS, however, utilizes primarily independent bulk transfer facilities. It does operate a Thoroughbred Bulk Transfer (TBT) facility in Indiana at Whiting as an NS-controlled, full-service facility, one of 30 TBT terminals on the NS network. The independent bulk transfer facilities in Indiana utilized by NS are located at Delphi, Dunkirk, Elkhart, Elwood, Evansville, Fort Wayne, Goshen, Hammond, Indianapolis, Jeffersonville, Lafayette, Lawrence, Logansport, Poneto (Wells County), Portage, South Bend, and Waterloo. In Indianapolis, NS also utilizes, via trackage rights, the lumber reload center of The Indiana Rail Road Company.

For the agribusiness industry, NS serves 77 grain elevators and 12 processing mills in Indiana. NS originates approximately 30 percent more grain tonnage in Indiana than CSXT, suggesting a larger average tonnage volume per elevator for NS than for CSXT, since each carrier serves about the same number of elevators in Indiana.

### **4.5.2.3 Short Lines**

Since short line traffic bases have a narrower commodity mix than CSXT and NS, bulk transfer facilities are characterized as niche market facilities that can provide a service that is complementary to the line haul rail carriers. In addition, some short lines have proportionately more public "team" tracks as an inducement to off-line industries. The Indiana Rail Road, for example, maintains a team track at most stations, as well as bulk transfer and distribution facilities in Indianapolis and Bloomfield, including a lumber reload facility with indoor and outdoor storage at its Senate Avenue Terminal in Indianapolis.

The Louisville & Indiana Railroad, having a diversified commodity mix, is able to more widely reach the Louisville metropolitan area by means of its transloading facility in Jeffersonville, IN, as well as a covered dock facility for handling Amtrak Express traffic, including U.S. Mail. In addition, LIRC has extensive break bulk traffic related to the nearly 1,000-acre Clark Maritime Centre, which handles diversified commodities.

### **4.5.3 Water Port Intermodal**

The Indiana Port Commission is a state authority consisting of three public ports. The three ports are International Port/Burns Harbor at Portage, IN; the Clark Maritime Centre at Jeffersonville, IN; and the Southwind Maritime Centre at Mount Vernon, IN. The International Port at Portage is served by NS, as well as the Indiana Harbor Belt Railroad for its connecting carriers. The Clark Maritime Centre is served by CSXT, Louisville & Indiana Railroad, and MG Rail, Inc., a division of Consolidated Grain & Barge Company. The Southwind Maritime Centre is served by CSXT and has a direct rail-to-water coal transloading facility capable of serving utility coal customers.

In the year 2000, the three public ports handled 6 million tons of merchandise, including coal, grain, steel, and fertilizer. Rail handled nearly 4 million tons of the above total volume. The largest proportion of this rail volume was at the Southwind Maritime Centre, which handles substantial coal traffic. This port is currently being tested as a rail-to-water transloading site for Powder River Basin coal destined to southern electric utilities.

While containerized traffic represents a negligible volume at these ports, the Port Commission is reviewing the potential for moving some commodities currently moved in bulk in containers. There is an increasing demand to preserve the integrity of the commodities, such as soybeans, corn, and specialty grains, with well defined specifications. Increased demand by consumers world-wide for organic food contributes to this trend. Bulk cargoes could utilize empty containers, which are steam-cleaned and pest-free, and which need to be repositioned from the U.S.A. to Asian and European markets.

The ability of the rail mode, including short lines, to tailor a competitive transportation product will determine whether rail will continue to maintain market share for a commodity, like grain, that is expected to undergo an increasing amount of market segmentation related to transportation.

Tell City River Port is owned by the City and operated by the Perry County Port Authority, which also operates the Hoosier Southern Railroad (HOS) which interchanges with the Norfolk Southern at Lincoln City, IN. The HOS commenced operations in 1995 restoring an out-of-service line acquired from NS. The Hoosier Southern handles approximately 2,500 carloads annually, including about 1,000 carloads from water to rail, primarily pig iron, coal, and other bulk commodities.

### **4.5.4 Other Ohio River Ports**

Numerous private port facilities are located along the 358 miles of the Ohio River bordering Indiana. Major shippers include Southern Indiana Gas & Electric, Alcoa, Marathon Ashland, American Electric Power, and Indiana-Kentucky Electric Corp. According to the U.S. Army Corps of Engineers, in 1999 nearly 40 million tons of commodities, primarily coal, was moved by barge to, from, or within Indiana on the Ohio River. However, the shipments were served by direct water-to-destination port facilities, and the commodities being shipped did not enter Indiana's rail network.

## **5.0 RAIL PASSENGER ISSUES**

### **5.1 Current Services**

#### **5.1.1 Amtrak**

Amtrak officially began service in the United States on May 1, 1971. The name Amtrak is the blending of the two words "American" and "Track," although the official name of the company is the National Railroad Passenger Corporation. Throughout the years, Amtrak has taken over the passenger operations for other railroad corporations and today it is the only significant intercity passenger rail service in the United States. Throughout the nation,

- Amtrak serves more than 500 stations in 45 states on more than 22,000 route miles.